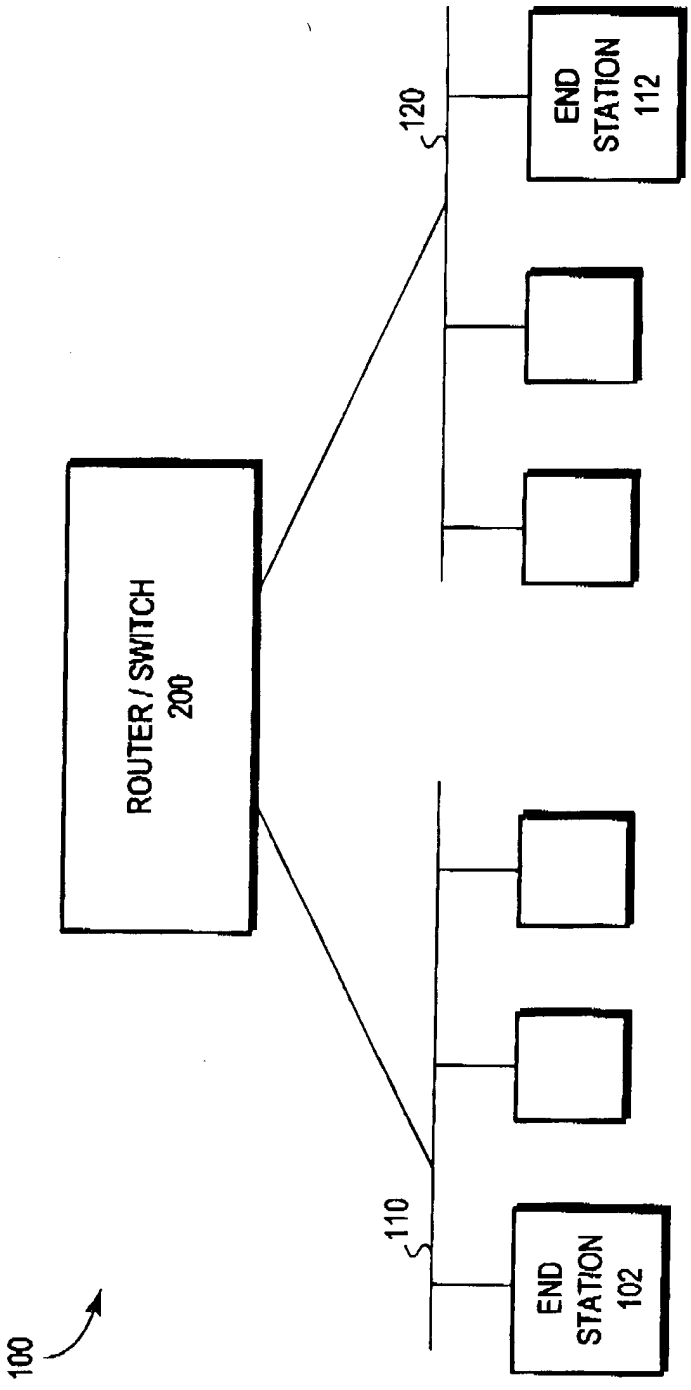
ROUTER / SWITCH
200
120
END
STATION
112
110
END
STATION
102
100

FIG. 1

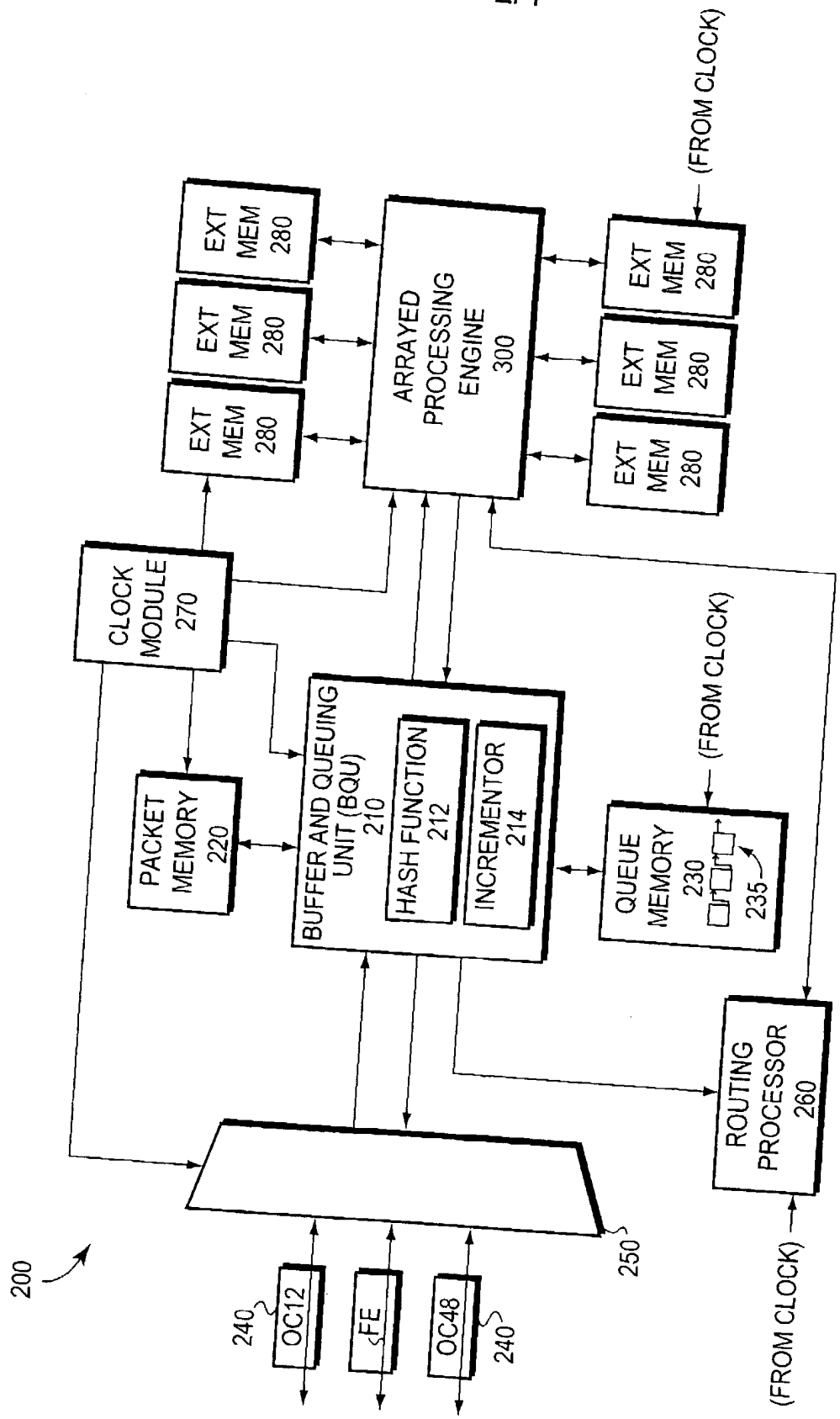
200
240
OC12
FE
OC48
240
250
(FROM CLOCK)
ROUTING PROCESSOR 260
QUEUE MEMORY 230
235
(FROM CLOCK)
BUFFER AND QUEUING UNIT (BQU) 210
HASH FUNCTION 212
INCREMENTOR 214
PACKET MEMORY 220
CLOCK MODULE 270
ARRAYED PROCESSING ENGINE 300
EXT MEM 280
EXT MEM 280
EXT MEM 280
EXT MEM 280
EXT MEM 280
EXT MEM 280
(FROM CLOCK)

FIG. 2

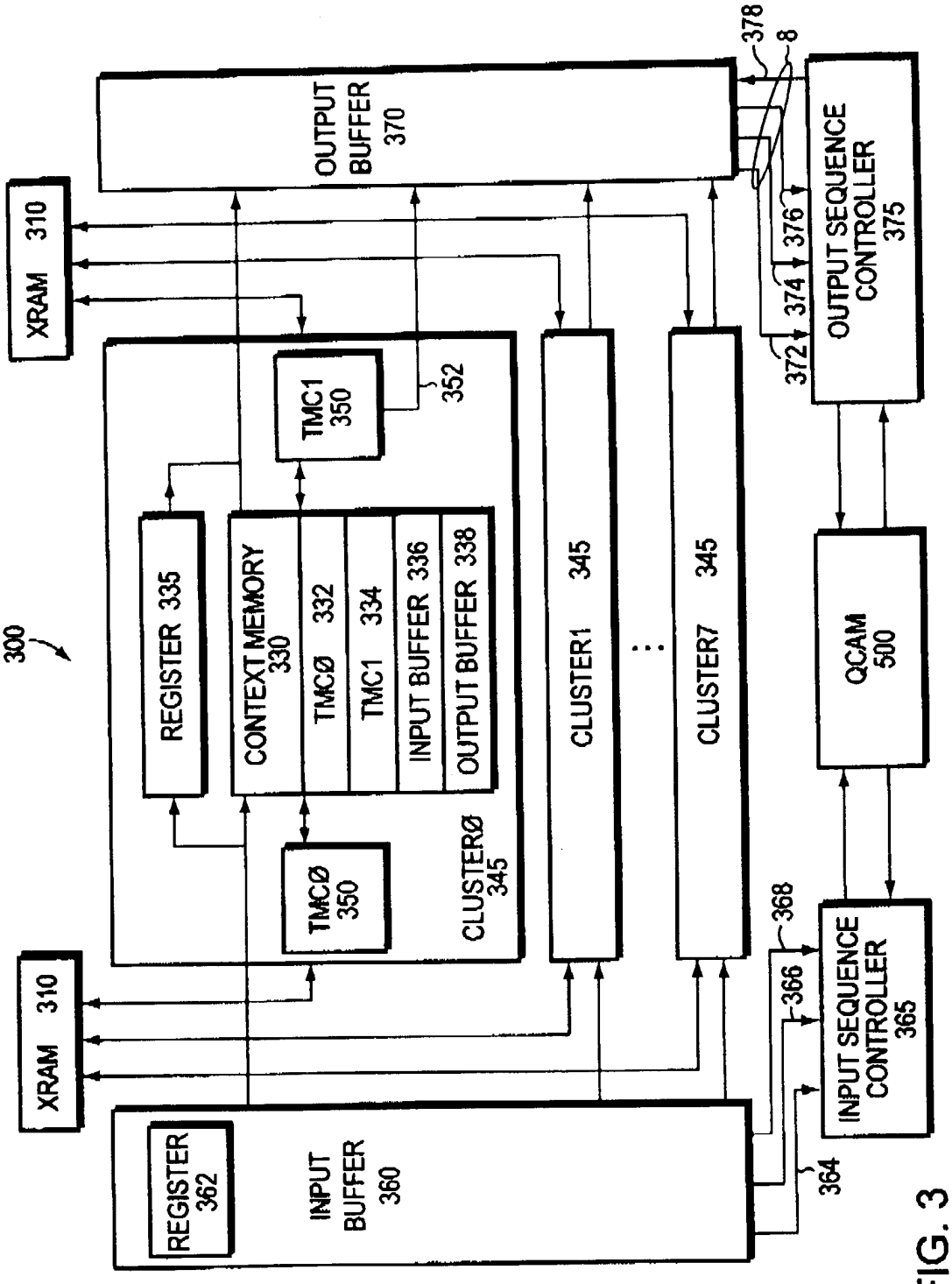
300
XRAM 310
XRAM 310
OUTPUT BUFFER 370
INPUT BUFFER 360
REGISTER 362
REGISTER 335
CONTEXT MEMORY 330
TMCØ 332
TMC1 334
INPUT BUFFER 336
OUTPUT BUFFER 338
TMC1 350
TMCØ 350
352
CLUSTERØ 345
CLUSTER1 345
CLUSTER7 345
OUTPUT SEQUENCE CONTROLLER 375
INPUT SEQUENCE CONTROLLER 365
QCAM 500
372
374
376
378
8
366
368
364

FIG. 3

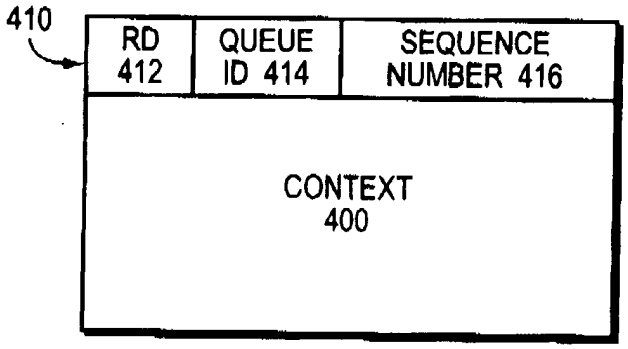
410
RD 412
QUEUE ID 414
SEQUENCE NUMBER 416
CONTEXT 400

FIG. 4

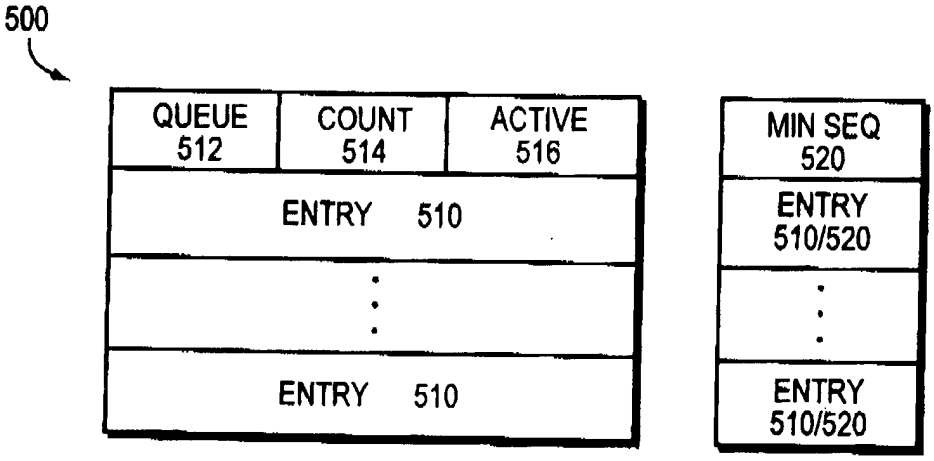
500
QUEUE 512
COUNT 514
ACTIVE 516
ENTRY 510
ENTRY 510
MIN SEQ 520
ENTRY 510/520
ENTRY 510/520

FIG. 5